



## Project Overview

Working with Parrott Construction on behalf of Grand Union Housing Group Ltd, the Croyland Road project involved constructing 10 piled rafts to support 24 units over an 8-week period. The site consisted of variable depths of Made Ground over The Whitby Mudstone Formation.

The site was also subject to elevated levels of Carbon Dioxide, to address these, under slab venting and pipework were proposed as solutions and a combination of voided and non-voided piled raft solutions.

## **Croyland Road**

Wellingborough

**CLIENT TYPE** Residential Construction

LOCATION Wellingborough, Northamptonshire,

NO. OF UNITS 24 units











## Geotechnical Expertise

The made ground was quite variable for this site so we requested further trial pitting and a tree plan in order to fully understand it's extent and identify the plots which were at risk of heave.

A heave report was then prepared and submitted to the warranty provider for approval. To handle the heave, 225mm void formers were used for plots 1 to 16 and 23 to 24 due to the high potential for soil expansion.

Due to the extent of made ground present, the site was designated as Characteristic Situation 2 for Ground Gas, this was overcome by the provision of our cast in situ monolithic slab and an overslab gas membrane, which satisfies the criteria set out within BS8485:2019 for residential properties and eliminates the need for underslab ventilation which would be required for Traditonal Beam & Block Flooring Systems.

## Overcoming Challenges

The Croyland Road project exemplifies our capacity to manage and overcome complex geotechnical construction challenges effectively. Despite highly variable ground conditions characterised bv Made Ground over stiff to firm clav. we successfully constructed 10 piled rafts to support 24 housing units within an impressive 8-week time frame.

The construction phase was marked by exceptional project management and technical expertise, culminating in the efficient installation resulting in a high-quality build that met all project requirements.